

Tularemia Script

Dr. Joanne Cono, CDC

First described as a plague-like illness in the United States in 1911, a new bacteria infecting ground squirrels was discovered in Tulare County, California, hence its name, tularemia. This disease, which affects mostly small animals, is frequently associated with sick rabbits, so it was also described as rabbit fever.

There are several ways that people can get infected – being bitten by a blood-sucking insect such as a tick or deer fly, by handling meat and skins of infected animals, from food or water that has been contaminated, or by breathing in the bacteria.

Cases of tularemia happen naturally in the environment. But cases have also happened in laboratory settings where the disease has been studied. Tularemia is not known to spread from person to person, but it has been studied as a biological weapon, because it could be used to contaminate food and water, and because it does not require many organisms to infect a person.

As with the use of plague, the Japanese also used tularemia in their biological warfare program. General Ishii used it in experiments against the people of Manchuria before World War Two. The goal was to create ways to infect as many people as possible at one time. Historians estimate that over 200,000 Chinese were killed in germ warfare field experiments.

The World Health Organization once estimated that 50 kilograms of tularemia spread through the air over a city of five million people would lead to 250,000 cases of illness. Nineteen thousand of these sick people would die.

Illness from tularemia would be expected to last for several weeks. However relapses can happen during the following weeks, or even months.

Dr. May Chu, CDC

Tularemia is not a household name, like plague is. However, it is a potentially dangerous disease that can be used as a weapon. Tularemia bacteria can be mixed into food and water supplies and then taken in by unsuspecting persons. Bacteria that is sprayed into the air is also a concern. In 1994 it was removed from the list of diseases that doctors are required to report when they occur. Because of the potential danger that tularemia poses to mankind it was placed back on the reportable list of diseases in 2000. Tularemia is also classified as a Category A agent. This means that it is one of the critical agents of concern for us from a bioterrorism perspective.

Tularemia was included in the United States stockpile of biological weapons in the late 1960s. Dr. Ken Alibek was a Soviet Union weapons defector who provided much information about the biological weapons programs in his country. He has indicated that his country and the United States helped similar studies trying to engineer tularemia strains that would be resistant to antibiotics and vaccines.

The United States ended its development of such weapons in the early 1970s.

Dr. Joanne Cono

It's important for doctors to recognize the symptoms and how it's spread. This early recognition would prevent a disaster if this disease were introduced into our food or water supply.

We're very concerned about terrorists using tularemia. The disease agent is found not only in nature, but can also be purchased from legitimate sources for commercial, scientific research. Although tularemia may be purchased from other parts of the world where its transfer is not well regulated, access to this bacteria is under tight control in the United States.